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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,531	01/16/2004	Atsushi Yoshizawa	US01-03046	5604
21254 7590 05/03/2007 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER BODDIE, WILLIAM	
			ART UNIT 2629	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/758,531

Applicant(s)

YOSHIZAWA ET AL.

Examiner

William L. Boddie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. In an amendment dated, January 31<sup>st</sup>, 2007, the Applicants amended claims 1, 3-4, 11 and 14-15. The Applicants also added new claims 21-25. Currently claims 1-25 are pending.

### ***Drawings***

2. The drawings were received on January 31<sup>st</sup>, 2007. These drawings are acceptable.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562).

**With respect to claim 1**, Hattori discloses, a three-dimensional image displaying apparatus (col. 1, lines 31-34 discloses, the creation of depth in the display) comprising:  
a front display unit (10 in fig. 1, for example) having at least one transparent display screen (13 for example in fig. 1), the at least one transparent display screen

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including a plurality of electroluminescent elements (col. 2, lines 40-44; also note the EL elements in figs. 5 and 6);

a rear display unit (20 in fig. 1) located behind the front display unit (clear from fig. 1) and having a display screen (23 for example in fig. 1); and

a spacer (3, 4 in fig. 1) connected between the front display unit and the rear display unit, the spacer providing a stability for the three-dimensional image when the three-dimensional image displaying apparatus receives an impact shock (this additional limitation concerning the spacer is seen as inherent when a spacer is included between the two display units. In short, the spacer, simply by virtue of being included would provide stability should the apparatus receive an impact shock.).

Hattori does not expressly disclose that the electroluminescent elements are organic, or that the three-dimensional image results from selectively applying a difference in brightness of selected pixels of the front display unit and the rear display unit.

Pichler discloses, a display device having multiple display units (fig. 3a) each of which are organic electroluminescent displays (col. 1, line 66 – col. 2, line 2).

Pichler and Hattori are analogous art because they are both from the same field of endeavor namely multi-unit electro-luminescent displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the electro-luminescent displays of Hattori out of organic material as taught by Pichler.

The motivation for doing so would have been the well-known benefit of decreased cost to manufacture organic EL elements due to reduced complexity over inorganic EL elements. Additionally organic EL elements provide power conservation as they require a lower drive voltage than inorganic EL elements.

Applicant's admitted prior art (hereinafter APA) discloses, creating a three-dimensional image by selectively applying a difference in brightness of selected pixels of a front display unit and a rear display unit (last para. of page 1 and beginning of page 2 of the specification).

Pichler, Hattori and APA are all analogous art because they are from the same field of endeavor namely stacked displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to generate the three-dimensional image using different brightness of selected pixels (as taught by APA) of the display units of Hattori and Pichler.

The motivation for doing so would have been that the combination then allows the external reflector (5 in fig. 1) to be removed as unnecessary, thereby significantly decreasing the size of the device.

**With respect to claim 2**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

Hattori further discloses, wherein the spacer prevents transmission of gas (col. 2, lines 58-63).

**With respect to claim 7**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

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Pichler further discloses, wherein the front display unit includes a first organic functional layer and the rear display unit includes a second organic functional layer (col. 4, lines 16-21; also see col. 3, lines 1-5).

**With respect to claim 8**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

Hattori further discloses, wherein the spacer is hermetically connected between the front display unit and the rear display unit (col. 2, lines 58-63).

**With respect to claim 9**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 7 (see above).

Hattori further discloses, wherein the spacer has a hollow space (4 in fig. 1) and at least one of the first and second EL functional layers (13 and 23 in fig. 1) is located in the hollow space of the spacer (clear from fig. 1).

**With respect to claim 10**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 9 (see above).

*as modified by Pichler*  
 Hattori further discloses, wherein at least one of the first and second organic  
 ^  
 layers is covered with a sealing device (col. 2, lines 61-63; the sealing device in  
 Hattori's disclosure is a silicone oil).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Pecile et al. (US 4,829,213).

**With respect to claim 3**, Hattori, APA and Pichler disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

Neither Hattori, APA nor Pichler expressly disclose, wherein the spacer is a cylindrical member.

Pecile discloses, wherein a spacer (20 in fig. 3) between two sides of an electroluminescent device comprises a cylindrical member (clear from fig. 2-3).

Pecile, Hattori, APA and Pichler are analogous art because they are all from the same field of endeavor namely, design and construction of the layers of an electroluminescent display device.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the sealing spacer of Pichler, APA and Hattori with the cylindrical spacer taught by Pecile for the benefit of simplifying the device manufacturing (Pecile; col. 4, lines 57-60).

7. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Suntola et al. (US 4,396,864).

**With respect to claims 4 and 11,** Pichler, APA and Hattori disclose, the three-dimensional image display apparatus according to claim 1 (see above).

Neither Pichler, APA nor Hattori expressly disclose, wherein the spacer comprises a transparent solid plate member.

Suntola discloses, an multi-unit electroluminescent display that comprises a transparent solid plate member (5 in fig. 1 and 1,5 in fig. 2; col. 2, line 63 – col. 3, line 6) as a spacer.

Pichler, Hattori, APA and Suntola are analogous art because they are all from the same field of endeavor namely, multi-unit electro-luminescent displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the spacer of Pichler, APA and Hattori with the transparent solid plate spacer taught by Suntola for the benefit of simplifying the manufacturing process, in not requiring the inserting of silicon oil into the display device.

8. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Urabe et al. (US 6,969,948).

**With respect to claims 5 and 13**, Pichler, APA and Hattori disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

Neither Hattori nor Pichler expressly disclose, wherein the spacer has an antireflection characteristic.

Urabe discloses, an organic electroluminescent device (fig. 12) that comprises a sealing substrate (20 in fig. 12) with an antireflection film (24 in fig. 12).

Urabe, Hattori, APA and Pichler are analogous art because they are all from the same field of endeavor namely, design and construction of the layers of an electroluminescent display device.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the antireflection coating taught by Urabe on the sealing spacer of Pichler, APA and Hattori for the benefit of increased contrast (Urabe; col. 11, lines 61-62).



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9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Kleinberger et al. (US 5,983,831).

**With respect to claim 6**, Hattori, APA and Pichler disclose, the three-dimensional image displaying apparatus according to claim 1 (see above).

Neither Hattori nor Pichler disclose, wherein the spacer includes a mechanism for adjusting a width of the spacer to adjust a distance between the front display unit and the rear display unit.

Kleinberger discloses, a multi-unit display device (fig. 16) wherein a spacer (134 in fig. 16) includes a mechanism for adjusting a width of the spacer (col. 32, lines 28-30) to adjust a distance between a front display unit (112 in fig. 16) and a rear display unit (1 in fig. 16).

Pichler, APA, Hattori and Kleinberger are analogous art because they are all from the same field of endeavor namely, multi-unit displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the movable mechanical means of Kleinberger in the display device of Pichler, APA and Hattori for the benefit of added flexibility in the fixing distance of the active layer from the other layers (Kleinberger; col. 32, lines 41-47).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Barrow et al. (US 4,719,385).

**With respect to claim 12**, Pichler, APA and Hattori disclose, the three-dimensional image display apparatus according to claim 1 (see above).

Neither Pichler, APA nor Hattori expressly disclose, that the spacer includes a plurality of poles.

Barrow discloses, including a spacer (30 in fig. 2) between two displays (10 and 20 in fig. 2), wherein the spacer includes a plurality of poles (col. 2, lines 64-68).

Pichler, Hattori, APA and Barrow are analogous art because they are all from the same field of endeavor namely, multi-unit electro-luminescent displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the spacer of Pichler, APA and Hattori with the poles taught by Barrow for the benefit of maintaining the panels in close predetermined proximity (Barrow; col. 2, lines 66-67).

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562) and Applicants' Admitted Prior Art and further in view of Taguchi et al. (US 4,945,009).

**With respect to claim 14**, Pichler, APA and Hattori disclose, the three-dimensional image display apparatus according to claim 1 (see above).

Hattori further discloses, wherein the spacer is a hollow member (clear from fig. 1).

Neither Pichler, APA nor Hattori expressly disclose, wherein the spacer is filled with an inert gas.

Taguchi discloses, a multi-panel EL display device (fig. 1) that is separated by a spacer (9 in fig. 1) with a hollow that is filled with an inert gas (nitrogen; col. 4, lines 23-25).

Pichler, Hattori, APA and Taguchi are analogous art because they are all from the same field of endeavor namely, multi-unit electro-luminescent displays.

12. At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the silicone oil filling of Pichler, APA and Hattori with the Nitrogen taught by Taguchi for the benefit that should the seal ever rupture, only an inert gas would leak, rather than a silicon oil.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable by Hattori et al. (US 5,912,649) in view of Applicants' Admitted Prior Art.

**With respect to claim 15**, Hattori discloses, a method of making a three-dimensional (col. 1, lines 31-34 discloses, the creation of depth in the display) displaying apparatus, comprising:

providing a front display unit (10 in fig. 1);

providing a rear display unit (20 in fig. 1);

connecting the front display unit with the rear display unit by a spacer (3 in fig. 1) such that a display screen of the front display unit is parallel to a display screen of the rear display unit (clear from fig. 1) the spacer providing a stability for the three-dimensional image when the three-dimensional image displaying apparatus receives an impact shock (this additional limitation concerning the spacer is seen as inherent when a spacer is included between the two display units. In short, the spacer, simply by

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virtue of being included would provide stability should the apparatus receive an impact shock.).

Hattori does not expressly disclose that the three-dimensional image results from selectively applying a difference in brightness of selected pixels of the front display unit and the rear display unit.

Applicant's admitted prior art (hereinafter APA) discloses, creating a three-dimensional image by selectively applying a difference in brightness of selected pixels of a front display unit and a rear display unit (last para. of page 1 and beginning of page 2 of the specification).

Hattori and APA are all analogous art because they are from the same field of endeavor namely stacked displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to generate the three-dimensional image using different brightness of selected pixels (as taught by APA) of the display units of Hattori.

The motivation for doing so would have been that the combination then allows the external reflector (5 in fig. 1) to be removed as unnecessary, thereby significantly decreasing the size of the device.

14. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Applicants' Admitted Prior Art and further in view of Urabe et al. (US 6,969,948).

**With respect to claim 16**, Hattori and APA disclose, the method according to claim 15 (see above).

Hattori further discloses, wherein the step of providing the front display unit includes providing an electroluminescent display screen made from a plurality of electroluminescent elements (col. 2, lines 40-44; also note the EL elements in figs. 5 and 6).

Neither Hattori nor APA expressly disclose that the electroluminescent display screen is an organic electroluminescent display screen.

Urabe discloses, an organic electroluminescent display device (col. 1, lines 12-18) each of which includes organic electroluminescent elements (col. 3, lines 19-24).

Urabe, APA and Hattori are analogous art because they are from the same field of endeavor namely, design and construction of the layers of an electroluminescent display device.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the electro-luminescent displays of Hattori out of organic material as taught by Urabe.

The motivation for doing so would have been the well-known benefit of decreased cost to manufacture organic EL elements due to reduced complexity over inorganic EL elements. Additionally organic EL elements provide power conservation as they require a lower drive voltage than inorganic EL elements.

**With respect to claim 17**, Hattori, APA and Urabe disclose, the method according to claim 16 (see above).

Hattori further discloses, wherein the front display unit has at least one transparent display screen (note the ray traces for the rear display traveling through the

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front display screen in fig. 1), and the rear display unit is located behind the front display unit (clear from fig. 1).

**With respect to claim 18**, Hattori, APA and Urabe disclose, the method according to claim 17 (see above).

Urabe further discloses, wherein the organic electroluminescent display screen includes an organic functional layer (14 in fig. 1) which has a light emitting layer (14c in fig. 2), and the light emitting layer emits light upon application of a current (col. 5, lines 16-18).

**With respect to claim 19**, Hattori, APA and Urabe disclose, the method according to claim 18 (see above).

Hattori further discloses, wherein the front display unit is hermetically connected with the rear display unit by the spacer (col. 2, lines 58-63).

**With respect to claim 20**, Hattori, APA and Urabe disclose, the method according to claim 19 (see above).

*as modified by APA + Urabe*

Hattori further discloses, including locating the organic functional layer in a hermetic confinement defined by the front display unit, spacer and rear display unit (clear from fig. 1).

15. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoguchi et al. (US 5,965,981) in view of Lynam et al. (US 5,384,578) and further in view of Suyama et al. (US 6,525,699).

**With respect to claim 21**, Inoguchi discloses, a front display unit (4-5 in fig. 9), the at least one transparent display screen including a plurality of organic

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electroluminescent elements (col. 14, line 60), the front display unit having a first substrate (4 in fig. 9) and a first organic functional layer (5 in fig. 9) attached to the first substrate;

a rear display unit (6' and 62 in fig. 9) located behind the front display unit (clear from fig. 9) and having a display screen (62 in fig. 9) the rear display having a second substrate (6' in fig. 9), a second electrochromic functional layer (62 in fig. 9; col. 9, lines 13-15) attached to the second substrate (clear from fig. 9) and a sealing element attached to the second substrate for covering the second substrate (9 in fig. 9); and

a spacer (note the black bars separating the two substrates 4 and 6' in fig. 9) connected between the front display unit and the rear display unit (clear from fig. 9), the spacer having a hollow space, and the second functional layer (62 in fig. 9) is located outside of the spacer (clear from fig. 9).

Inoguchi does not expressly disclose, that the electrochromic layer comprises an organic functional layer, or that the device displays three-dimensional images.

Lynam discloses, an electrochromic device comprising an organic functional layer (col. 3, lines 7-18).

Inoguchi and Lynam are analogous art because they are both from the same field of endeavor namely, electrochromic display devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the organic thin film electrochromic device taught by Lynam, as the electrochromic display of Inoguchi.

The motivation for doing so would have been the good memory characteristics that are associated with such electrochromic displays, thereby decreasing power consumption.

Suyama discloses, a three-dimensional image displaying apparatus, comprising: a front and rear display unit (101 and 102 in fig. 4), wherein the two displays are separated by a predefined distance. The three-dimensional image being displayed by altering the brightness of each display unit individually (abstract).

Suyama, Inoguchi and Lynam are all analogous art because they are all from the same field of endeavor namely, flat panel display design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to enable three-dimensional image display in the display device of Inoguchi and Lynam.

The motivation for doing so would have been to present an immersive three-dimensional image to the user without requiring unnatural special glasses (Suyama; col. 1, lines 61-64).

**With respect to claim 22,** Inoguchi discloses, a method of making a display apparatus, comprising:

Providing a front display unit (4-5 in fig. 9), the at least one transparent display screen including a plurality of organic electroluminescent elements (col. 14, line 60), the front display unit having a first substrate (4 in fig. 9) and a first organic functional layer (5 in fig. 9) attached to the first substrate;



providing a rear display unit (6' and 62 in fig. 9) located behind the front display unit (clear from fig. 9) and having a display screen (62 in fig. 9) the rear display having a second substrate (6' in fig. 9), a second electrochromic functional layer (62 in fig. 9; col. 9, lines 13-15) attached to the second substrate (clear from fig. 9) and a sealing element attached to the second substrate for covering the second substrate (9 in fig. 9); and

connecting the front display unit with the rear display unit by a spacer (note the black bars separating the two substrates 4 and 6' in fig. 9) such that the front display unit is parallel to a display screen of the rear display unit (clear from fig. 9), the spacer having a hollow space, and the second functional layer (62 in fig. 9) is located outside of the spacer (clear from fig. 9).

Inoguchi does not expressly disclose, that the electrochromic layer comprises an organic functional layer, or that the device displays three-dimensional images.

Lynam discloses, an electrochromic device comprising an organic functional layer (col. 3, lines 7-18).

Inoguchi and Lynam are analogous art because they are both from the same field of endeavor namely, electrochromic display devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the organic thin film electrochromic device taught by Lynam, as the electrochromic display of Inoguchi.

The motivation for doing so would have been the good memory characteristics that are associated with such electrochromic displays, thereby decreasing power consumption.

Suyama discloses, a three-dimensional image displaying apparatus, comprising: a front and rear display unit (101 and 102 in fig. 4), wherein the two displays are separated by a predefined distance. The three-dimensional image being displayed by altering the brightness of each display unit individually (abstract).

Suyama, Inoguchi and Lynam are all analogous art because they are all from the same field of endeavor namely, flat panel display design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to enable three-dimensional image display in the display device of Inoguchi and Lynam.

The motivation for doing so would have been to present an immersive three-dimensional image to the user without requiring unnatural special glasses (Suyama; col. 1, lines 61-64).

**With respect to claim 23,** Suyama, Inoguchi and Lyman disclose, the three-dimensional image displaying apparatus according to claim 21 (see above).

Inoguchi further discloses, wherein the front display unit further includes a second sealing element attached to the first substrate for sealing the first organic functional layer (col. 6, lines 12-15) and the second sealing element is located between the spacer and the first substrate (note the extra space between the edges of the

spacer and the functional layer in fig. 9, sealing element is considered between the spacer and the first substrate at this point.).

**With respect to claim 24**, Suyama, Inoguchi and Lyman disclose, the three-dimensional image displaying apparatus according to claim 21 (see above).

Inoguchi further discloses, wherein the first organic functional layer is housed in the spacer (clear from fig. 9).

16. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al. (US 5,912,649) in view of Pichler (US 5,929,562).

**With respect to claim 25**, Hattori discloses, a three-dimensional image displaying apparatus (fig. 1), comprising:

a front display unit (10 in fig. 1) having at least one transparent display screen (13 in fig. 1), the at least one transparent display screen including a plurality of electroluminescent elements (col. 2, lines 40-44; also note the EL elements in figs. 5 and 6);

a rear display unit (20 in fig. 1) located behind the front display unit (clear from fig. 1) and having a display screen (23 for example in fig. 1); and

a fixing element (3 in fig. 1) for attaching the front display to the rear display unit (clear from fig. 1).

Hattori does not expressly disclose that the electroluminescent elements are organic.

Pichler discloses, a display device having multiple display units (fig. 3a) each of which are organic electroluminescent displays (col. 1, line 66 – col. 2, line 2).

Pichler and Hattori are analogous art because they are both from the same field of endeavor namely multi-unit electro-luminescent displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the electro-luminescent displays of Hattori out of organic material as taught by Pichler.

The motivation for doing so would have been the well-known benefit of decreased cost to manufacture organic EL elements due to reduced complexity over inorganic EL elements. Additionally organic EL elements provide power conservation as they require a lower drive voltage than inorganic EL elements.

#### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

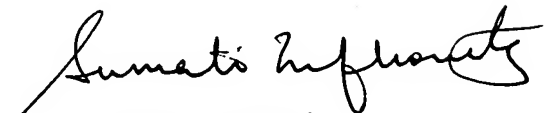
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18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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wlb

  
SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER